

Airport capacity profile estimates were created using a standard set of performance characteristics and do not take into account non-runway constraints, unless otherwise noted. The capacity estimates developed for this report are not intended to replace the results of any detailed analysis that would precede an environmental, investment, or policy decision.

The list of Future Improvements and their expected effects on capacity does not imply FAA commitment to, or approval of, any item on the list.

DEFINITION

- The capacity profile shows the hourly throughput that an airport is able to sustain during periods of high demand, represented as the range between the model-estimated capacity and the ATC facility reported rate (called rate). Each weather condition has a unique capacity rate range.
- The following charts compare actual hourly traffic with the estimated capacity curves for LAS. Some hourly traffic points fall outside the estimated capacity curves. There are many reasons why this may occur without affecting operational safety. For example, more aircraft may have been able to depart Runway 1L than were assumed in the analysis. Also, actual weather may have been better for part of the hour than that recorded for the hour, allowing more efficient ATC procedures than were modeled.

RECENT CAPACITY IMPROVEMENTS AT LAS

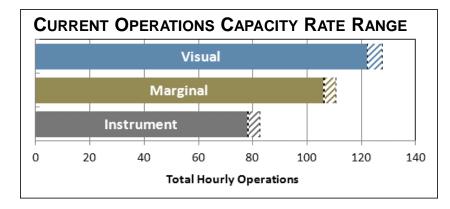
Implementation of Traffic Management Advisor (TMA) helps to improve the flow of arrivals to the runways.

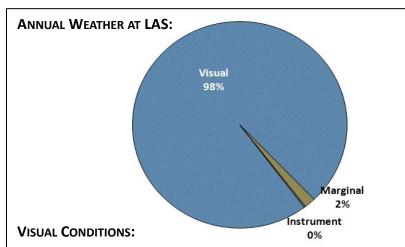
FUTURE IMPROVEMENTS AT LAS

- Improved Runway Delivery Accuracy: The combined effects of several new capabilities, including ADS-B Out, CDTI, and TBM in the terminal area, will improve the ability of controllers by 2020 to deliver aircraft to the runway with the desired separation from the preceding aircraft. This will reduce the average spacing between arrivals and boost arrival capacity.
- Wake Turbulence Mitigation for Arrivals Procedural (WTMA-P) is anticipated to be available at LAS by 2020. WTMA-P will enable reduced diagonal separation between closely-spaced parallel arrivals for all categories of lead aircraft. However it does not apply to the profiled configuration in Marginal conditions.
- Additional information on these improvements may be found in this report under "Future Operation Assumptions."

DATA SOURCES

- Actual hourly LAS operations, weather and configuration data were obtained from the FAA ASPM database, and represent operational hours from 7am to 11pm local time for all of Fiscal Years 2009 and 2010. Actual configuration usage is determined by multiple operational factors, including weather conditions.
- Facility reported rates were provided by ATC personnel at LAS.
- Model-estimated rates are derived from operational information provided by ATC.





 Ceiling and visibility allow for visual approaches: at least 5000 feet ceiling and 5 miles visibility

MARGINAL CONDITIONS:

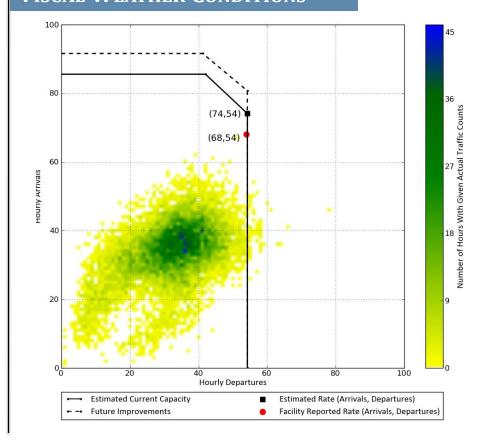
 Ceiling and visibility below visual approach minima but better than Instrument conditions

INSTRUMENT CONDITIONS:

 Ceiling and visibility below 1000 feet ceiling or 3 miles visibility

| LAS Scenario | Arrival Runways | Departure Runways | Procedures | Hourly Rate | |
|---|--------------------|----------------------|---|-----------------------------|---------------------|
| | | | | ATC Facility Reported | Model- Estimated |
| CURRENT OPERATIONS | 1L, 25L | 1R, 1L | Visual Approaches, Visual Separation | 122 | 128 |
| FUTURE IMPROVEMENTS Improved Runway Delivery Accuracy | 1L, 25L | 1R, 1L | | N/A | 135 |

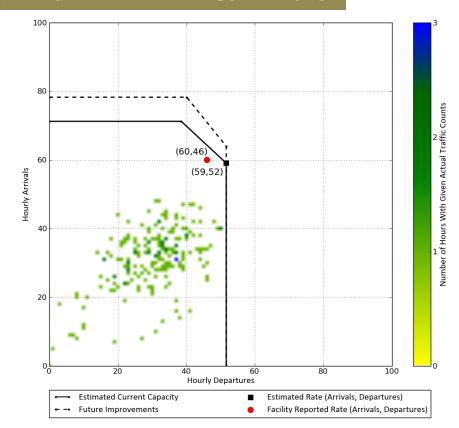
VISUAL WEATHER CONDITIONS



- The capacity rate range in Visual conditions is currently 122-128 operations per hour.
- This profiled configuration is not LAS's most commonly used configuration. Prevailing winds must be favorable for LAS to use it, which typically occur in the winter time. This configuration offers higher capacity due to the least restrictive departure headings and the lack of a physical intersection.
- During a two year period, the airport operated in variations of this configuration approximately 9% of the time in Visual weather conditions (totaling 9% annually). [Note: Runway 25L/7R was closed from November 2008 through May 2009, so the percentages cited above include hours during which the this configuration was not available.
- Military airspace, high terrain, and proximity to other airports reduce LAS's arrival and departure flows.
- Departures on Runway 1L are limited to aircraft that meet weight requirements.

| LAS Scenario | Arrival Runways | Departure Runways | Procedures | Hourly Rate | |
|---|--------------------|----------------------|---|-----------------------------|---------------------|
| | | | | ATC Facility Reported | Model- Estimated |
| CURRENT OPERATIONS | 1L, 25L | 1R, 1L | Instrument Approaches, Visual Separation | 106 | 111 |
| FUTURE IMPROVEMENTS Improved Runway Delivery Accuracy | 1L, 25L | 1R, 1L | | N/A | 116 |

MARGINAL WEATHER CONDITIONS



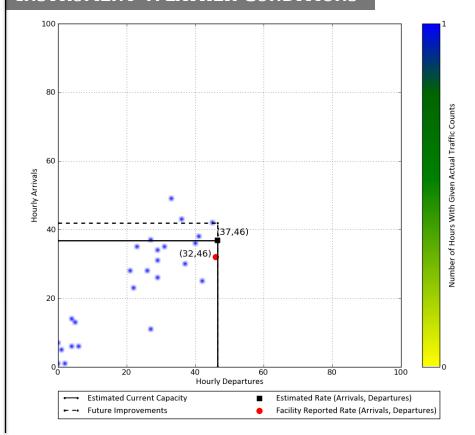
- The capacity rate range in Marginal conditions is currently 106-111 operations per hour.
- During a two year period, the airport operated in variations of this configuration approximately 24% of the time in Marginal weather conditions (totaling less than 1% annually). [Note: Runway 25L/7R was closed from November 2008 through May 2009, so the percentages cited above include hours during which the this configuration was not available.]
- Military airspace, high terrain, and proximity to other airports, reduce LAS's arrival and departure flows.
- Departures on Runway 1L are limited to aircraft that meet weight requirements.
- Reduced separation (2.5 NM) between arrivals is authorized for approaches to Runway 25L at LAS.

Instrument

McCarran International (Las Vegas)

| LAS Scenario | Arrival Runways | Departure Runways | Procedures | Hourly Rate | |
|--|--------------------|----------------------|--|-----------------------------|---------------------|
| | | | | ATC Facility Reported | Model- Estimated |
| CURRENT OPERATIONS | 25L | 1R, 1L | Instrument Approach, Radar Separation | 78 | 83 |
| FUTURE IMPROVEMENTS Improved Runway Delivery Accuracy WTMA-P | 25L, 25R | 1R, 1L | Dependent Instrument Approaches, Radar Separation | N/A | 89 |

INSTRUMENT WEATHER CONDITIONS



- The capacity rate range in Instrument conditions is currently 78-83 operations per hour.
- During a two year period, the airport operated in variations of this configuration approximately 4% of the time in Instrument weather conditions (totaling less than 1% annually). [Note: Runway 25L/7R was closed from November 2008 through May 2009, so the percentages cited above include hours during which the this configuration was not available.]
- Military airspace, high terrain, and proximity to other airports reduce LAS's arrival and departure flows.
- Departures on Runway 1L are limited to aircraft that meet weight requirements.
- Reduced separation (2.5 NM) between arrivals is authorized for approaches to Runway 25L at LAS.
- In the future, WTMA-P would enable the use of a second, dependent arrival stream, assuming a precision approach capability is put in place on Runway 25R to support this procedure.